Lift Operating Instructions

Before lift operation, park on a level surface, away from vehicular traffic. Place the vehicle transmission in "Park" and engage the parking brake. Vehicle engine must be running.

If your lift does not function as intended or a visual or audible warning signal is activated, review the FMVSS 403/404 Certification Checklist. Refer to the Manual Operating Instructions to manually operate lift. An NL Series lift is depicted in photos below. Operating procedures are applicable for other lift models.

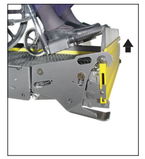
OPEN DOOR(S) AND SECURE

TO UNFOLD PLATFORM:

Stand clear and press the UNFOLD switch until the platform stops (reaches floor level - unfolds fully). Release switch.

Note: In event platform does not unfold, press FOLD switch to release Lift-Tite™ latches.

TO UNLOAD PASSENGER:



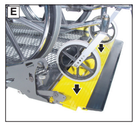
1. Read Note below! Load passenger onto platform and lock wheelchair brakes.

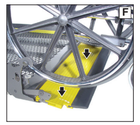
Note: Outer Barrier must be UP.

2. Press DOWN switch until the entire platform reaches ground level (see Photo B) and the outer barrier unfolds fully (ramp position). See Photo C. Release switch.

3. Unlock wheelchair brakes and unload passenger from platform.

Note: Outer barrier must be fully unfolded (ramp position) until the entire wheelchair (or standee) has crossed the outer barrier. See Photos E and F.





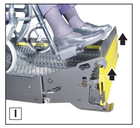
TO LOAD PASSENGER:

1. Read Notes below! Load passenger onto platform and lock wheelchair brakes. See Photo G.

Note: Outer barrier must be fully unfolded (ramp position) until the entire wheelchair (or standee) has crossed the outer barrier. See Photos E and F.

Note: Passenger must be positioned fully inside yellow boundries.

2. Press UP switch (Photo H) to fold outer barrier UP fully (vertical - see Photo I), and raise the platform to floor level. See Photo J. Release switch.



3. Unlock wheelchair brakes and unload passenger from platform.

TO FOLD PLATFORM:

Press FOLD (In) switch until platform stops (fully folded). See Photos K and L. Release switch.

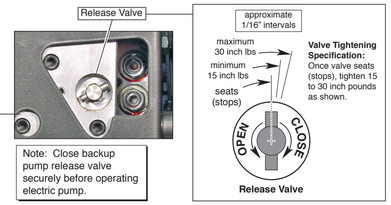
CLOSE DOOR(S)

Manual Operating Instructions

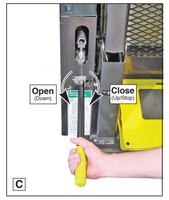
Instructions are provided for all steps that differ from standard lift operation procedures.

Manual Operation decal 32940 also provides manual operating instructions (posted on pump cover).

Refer to the Lift Operating Instructions for all normal lift operation procedures. **Follow all Lift Operation Safety Precautions!**



Note: Close backup pump release valve securely before operating electric pump.



Note: Inner roll stop and outer barrier automatically function during manual operations.

To Unfold Platform (Out):

Using hand pump handle (Photo B):

1. Close hand pump valve (place slotted end of pump handle onto backup pump release valve and turn clockwise). See Photo C.
2. Insert handle in pump and stroke until platform folds fully (stops). See Photo D.
3. Open hand pump valve (turn counterclockwise) until platform reaches floor level. Open 1/2 turn only.
4. Close hand pump valve (turn clockwise).

   Note: Valve must be tight, but do not overtighten.

Down (To Lower):

Place slotted end of pump handle onto back-up pump release valve and turn counterclockwise (open 1/2 turn only) until the platform reaches ground level and the outer barrier unfolds.

Up (To Raise):

Using hand pump handle:

a. Place slotted end of pump handle onto back-up pump release valve and turn clockwise to close securely. See Photo C.

   Note: Valve must be tight, but do not overtighten.

b. Insert handle into back-up pump and stroke until platform reaches floor level (see Photo D).

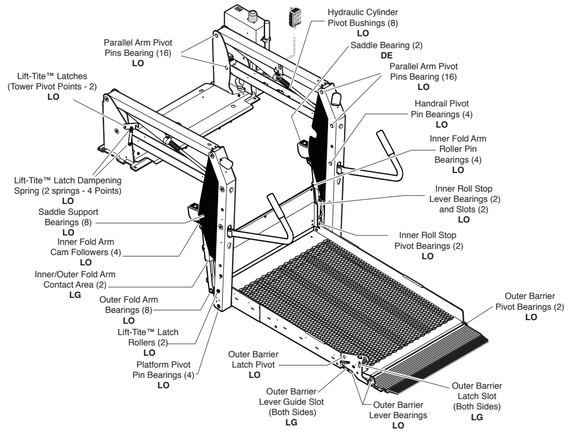
To Fold Platform (In):

Insert handle into back-up pump and stroke until platform stops (folds fully). See Photo D.

Note: Close back-up pump release valve securely before operating electric pump. Store pump handle in clamps shown in Photo B.

Maintenance and Lubrication

Lubrication Diagram


Hydraulic Cylinder Pivot Bushings (8) LO
Parallel Arm Pivot Pins Bearing (16) LO
Saddle Bearing (2) DE
Parallel Arm Pivot Pins Bearing (16) LO
Lift-Tite™ Latches (Tower Pivot Points - 2) LO
Handrail Pivot Pin Bearings (4) LO
Inner Fold Arm Roller Pin Bearings (4) LO
Lift-Tite™ Latch Dampening Spring (2 springs - 4 Points) LO
Inner Roll Stop Lever Bearings (2) and Slots (2) LO
Saddle Support Bearings (8) LO
Inner Roll Stop Pivot Bearings (2) LO
Inner Fold Arm Cam Followers (4) LO
Inner/Outer Fold Arm Contact Area (2) LG
Outer Barrier Pivot Bearings (2) LO
Outer Fold Arm Bearings (8) LO
Lift-Tite™ Latch Rollers (2) LO
Platform Pivot Pin Bearings (4) LO
Outer Barrier Latch Pivot LO
Outer Barrier Lever Guide Slot (Both Sides) LG
Outer Barrier Lever Bearings LO
Outer Barrier Latch Slot (Both Sides) LG

Note: An NL-2 Series lift model is depicted and detailed in the Lubrication Diagram and the Maintenance and Lubrication Schedule. Refer to the Service manual applicable for your lift model if your lift is a different Series (manual provided electronically on the CD supplied with your lift).

See the Maintenance/Lubrication Schedule for recommended applications per number of cycles.

Lubricant	Type	Specified (recommended) Lubricant	Available Amount	Braun Part No.
LO - Light Oil	Light Penetrating Oil (30 weight or equivalent)	LPS2, General Purpose Penetrating Oil	16 oz. Aerosol Can	15807
DE - Door-Ease	Stainless Stick Style (tube)	Door-Ease Stick (tube)	1.68 oz.	15806
LG - Light Grease	Light Grease (Multipurpose)	Lubriplate	14 oz. Can	15805

Maintenance and Lubrication Schedule

Proper maintenance is necessary to ensure safe, troublefree operation. Inspecting the lift for any wear, damage or other abnormal conditions should be a part of the transit agency daily service program. Simple inspections can detect potential problems.

The maintenance and lubrication procedures specified in this schedule must be performed by a Braun authorized service representative at the scheduled intervals according to the number of cycles. Braun dual parallel arm lifts are equipped with hardened pins and self-lubricating bushings to decrease wear, provide smooth operation and extend the service life of the lift.

When servicing the lift at the recommended intervals, inspection and lubrication procedures specified in the previous sections should be repeated. Clean components and the surrounding area before applying lubricants. LPS2 General Purpose Penetrating Oil is recommended where Light Oil is called out. Use of improper lubricants can attract dirt or other contaminants which could result in wear or damage to the components. Platform components exposed to contaminants when lowered to the ground may require extra attention.

Lift components requiring grease are lubricated during assembly procedures. When these components are replaced, grease must be applied during installation procedures. Specified lubricants are available from The Braun Corporation (part numbers provided above).

All listed inspection, lubrication and maintenance procedures should be repeated at 750 cycle intervals following the scheduled 4500 cycle maintenance procedures. These intervals are a general guideline for scheduling maintenance procedures and will vary according to lift use and conditions. Lifts exposed to severe conditions (weather, environment, contamination, heavy usage, etc.) may require inspection and maintenance procedures to be performed more often than specified.

⚠WARNING

Maintenance and lubrication procedures must be performed as specified by an authorized service technician. Failure to do so may result in serious bodily injury and/or property damage.

Cycle Counter: NL-2 Series lit models are equipped with a cycle counter located on the top of the pump module. This cycle counter allows the lift attendant/operator to easily track the number of cycles during daily inspections of the lift.

Discontinue lift use immediately if maintenance and lubrication procedures are not properly performed, or if there is any sign of wear, damage or improper operation. Contact your sales representative or call The Braun Corporation at 1-800-THE LIFT®. One of our national Product Support representatives will direct you to an authorized service technician who will inspect your lift.

750 Cycles	Outer barrier pivot points (2)	Apply Light Oil - See Lubrication Diagram
	Outer barrier latch pivot point	Apply Light Oil - See Lubrication Diagram
	Outer barrier latch slot	Apply Light Grease to both side of slot. See Lubrication Diagram
	Outer barrier lever bearings (2)	Apply Light Oil - See Lubrication Diagram
	Lift-Tite™ latches (tower pivot points - 2)	Apply Light Oil - See Lubrication Diagram
	Lift-Tite™ latch gas (dampening) spring pivot points (2 springs - 4 points)	Apply Light Oil - See Lubrication Diagram
	Inspect Lift-Tite™ latches and gas springs for wear or damage (bent, deformed or misaligned), positive securement (external snap rings) and proper operation	Resecure, replace damaged parts or otherwise correct as needed. Note: Apply Light Grease to Lift-Tite™ latch tower pivot point if replacing latch.
	Inspect outer barrier for proper operation	Correct or replace damaged parts.
	Inspect outer barrier latch for proper operation, positive securement, and detached or missing spring	Correct or replace damaged parts and/or relubricate. See Lubrication Diagram
	Inspect lift for wear, damage or any abnormal condition	Correct as needed.

750 Cycles	Inspect lift for rattles	Correct as needed.
	Adjust fold pressure and outer barrier fold pressure (if applicable)	See applicable service manual
	Verify FMVSS 403/404 Certification Checklist	See FMVSS 403/404 Certification Checklist

1500 Cycles	**Perform all procedures listed in previous section also**	
	Inner/outer fold arms (2)	Apply grease (synthetic) to contact areas between inner/outer fold arms. See Lubrication Diagram.
	Platform pivot pin bearings (4)	Apply Light Oil - See Lubrication Diagram
	Outer fold arm bearings (8)	Apply Light Oil - See Lubrication Diagram
	Inner roll stop pivot bearings (2)	Apply Light Oil - See Lubrication Diagram
	Inner roll stop lever bearings (2)	Apply Light Oil - See Lubrication Diagram
	Inner roll stop lever slot (2)	Apply Light Oil - See Lubrication Diagram
	Saddle support bearings (8)	Apply Light Oil - See Lubrication Diagram
	Inner fold arm roller pin bearings (4)	Apply Light Oil - See Lubrication Diagram
	Inner fold arm cam followers (4)	Apply Light Oil - See Lubrication Diagram
	Parallel arm pivot bearings (16)	Apply Light Oil - See Lubrication Diagram
	Handrail pivot pin bearings (4)	Apply Light Oil - See Lubrication Diagram
	Hydraulic cylinder bushings (8)	Apply Light Oil - See Lubrication Diagram
	Outer barrier lever guide slot	Apply Light Grease to both sides of slot. See Lubrication Diagram.
	Inspect Lift-Tite™ latch rollers for wear or damage, positive securement and proper operation (2)	Correct, replace damaged parts and/or relubricate.
	Inspect inner roll stop for: • Wear or damage • Proper operation. Roll stop should just rest on top surface of the threshold plate. • Positive securement (both ends)	Resecure, replace or correct as needed. See Platform Angle Instructions and Tower Microswitch Adjustment Instructions.
	Inspect handrail components for wear or damage, and for proper operation	Replace damaged parts
	Inspect microswitches for securement and proper adjustment.	Resecure, replace or adjust as needed. See Microswitch Adjustment Instructions.
	Make sure lift operates smoothly	Realign towers and vertical arms. Lubricate or correct as needed.
	Inspect external snap rings: • Outer fold arm (6) • Lift-Tite™ latch roller (2) • Lift-Tite™ latch gas (dampening) spring (4) • Inner fold arm cam followers (4) • Inner fold arm roller pins (4) • Outer barrier hydraulic cylinder mounting pin (2) • Inner roll stop lever bracket pins (2)	Resecure or replace if needed.
	Inspect inner roll stop locks (2) and torson springs (2) for wear or damage and for proper operation.	Replace damaged parts. Apply Light Oil to inner roll stop lock pivot point.
	Inspect outer fold arm pins (2), axles (2) and bearings (8) for wear or damage and positive securement	Replace damaged parts and resecure as needed. Apply Light Oil.
	Remove pump module cover and inspect: • Hydraulic hoses, fittings and connections for wear or leaks • Harness cables, wires, terminals and connections for securement or damage • Relays, fuses, power switch and lights for securement or damage	Resecure, replace or correct as needed.

4500 Cycles	**Perform all procedures listed in previous sections also**	
	Inspect cotter pins on platform pivot pin (2)	Resecure, replace or correct as needed
	Hydraulic Fluid (Pump) - Check level. Note: Fluid should be changed if there is visible contamination. Inspect the hydraulic system (cylinder, hoses, fittings, seals, etc.) for leaks if fluid level is low.	Use Braun 32840-QT hydraulic fluid (Exxon® Univis HVI 26). Do not mix with Dextron III or other hydraulic fluids. Check fluid level with platform lowered fully. Fill to maximum fluid level indicated on reservoir (specified on decal). Do not overfill. If fluid level decal is not present - measure 1-3/8" from the fill port to locate fluid level.
	Inspect cylinders, fittings and hydraulic connections for wear, damage or leaks	Tighten, repair or replace if needed.
	Inspect outer barrier cylinder hose assembly (hose, fasteners, connections, etc.) for wear, damage or leakage (if equipped)	Tighten, repair or replace if needed.
	Inspect parallel arms, bearings and pivot pins for visible wear or damage	Replace if needed.
	Inspect parallel arm pivot pin mounting bolts (8)	Tighten or replace if needed.
	Inspect platform pivot pins, bearings and vertical arms for wear, damage and positive securement	Replace damaged parts and resecure as needed. Apply Light Grease during reassembly procedures.
	Inspect inner/outer fold arms, saddle, saddle support and associated pivot pins and bearings for visible wear or damage	Replace if needed.
	Inspect gas springs (cylinders) for wear or damage, proper operation and positive securement	Tighten, replace or correct as needed
	Inspect saddle bearing (UHMW - 2)	Apply Door-Ease or replace if needed. See Lubrication Diagram.
	Inspect vertical arm plastic covers	Resecure or replace if needed.
	Inspect power cable	Resecure, repair or replace if needed.
	Mounting	Check to see that the lift is securely anchored to the vehicle and there are no loose bolts, broken welds, or stress fractures.
	Decals and Antiskid	Replace decals if worn, missing or illegible. Replace antiskid if worn or missing.

Consecutive 750 Cycle Intervals	Repeat all previously listed inspection, lubrication and maintenance procedures at 750 cycle intervals.